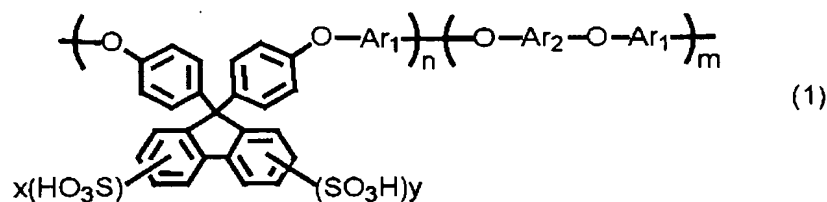


ABSTRACT

A sulfonated aromatic polyether useful for an electrolyte membrane superior in the properties such as conductivity and stability which has a principle backbone represented by the general formula (1).

(Chemical formula 1)



wherein Ar_1 and Ar_2 are defined C_{6-20} groups containing aromatic ring(s), x and y are each an integer of 0 to 3 which represent the degree of sulfonation, with the proviso that the case where both of x and y are simultaneously 0 is excluded, and n and m are each an integer of not lower than 2 which represent the degree of polymerization. In the sulfonated aromatic polyether, the sites of introduction of the sulfonic acid groups are strictly specified, and the aromatic rings in the main chain has no sulfonic acid group at all, therefore, it is advantageous in that both of proton conductivity at higher than 100°C and oxidative and hydrolytic stability are superior.